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Bushnell et al.

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(54) **CONTENT CREATION USING ELECTRONIC INPUT DEVICE ON NON-ELECTRONIC SURFACES**

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(57) **ABSTRACT**

Content can be using an input device without a touch-sensitive surface. In some examples, touch-down and lift-off on a non-touch-sensitive surface can be monitored by a force sensor of the input device. The position and/or motion of the input device can be tracked according to various methods including one or more of a motion and orientation sensor, a camera, or an electromagnetic- or sound-based triangulation scheme. The force data and position/motion data can be processed to generate content, including textual character input and three-dimensional objects. In some examples, the content can be generated based on tracking position and/or motion of the input device without requiring contact with a surface.

23 Claims, 9 Drawing Sheets